

APPENDIX A**LIST OF PARTIES****Comments**

Aeronautical Radio, Inc.
Association of Public-Safety Communications Officials-International, Inc.
Association of American Railroads
BellSouth Corporation
Boeing Company
Bosch Telecom, Inc.
Celsat America, Inc.
Century OCN Programming, Inc.
Constellation Communications, Inc.
Fixed Wireless Communications Coalition
Globalstar, L.P.
Hughes Communications Galaxy, Inc. and Hughes Communications, Inc.
ICO Services Limited
ICO USA Service Group (BT North America Inc., Hughes Telecommunications and Space Company, Telecomunicaciones de Mexico, TRW Inc.)
Inmarsat Ltd.
Iridium LLC
Lynch, Timothy H.
Mobile Communications Holdings, Inc.
National Academies' Committee on Radio Frequencies
National Telecommunications and Information Administration
PanAmSat Corporation
Pegasus Development Corporation
Personal Communications Industry Association
Satellite Industry Association
SBC Communications Inc.
Society of Broadcast Engineers, Inc.
TMI Communications and Company, Limited Partnership
United States Coast Guard
UTC, The Telecommunications Association
WinStar Communications, Inc.
Wireless Communications Association International, Inc.

Reply Comments

American Petroleum Institute
Association of American Railroads
Association for Maximum Service Television, Inc. and the National Association of Broadcasters BellSouth Corporation
Boeing Company
Celsat America, Inc.
Constellation Communications, Inc.
European Union/Delegation of the European Commission
Fixed Wireless Communications Coalition
GE American Communications, Inc.
Globalstar, L.P.
Hughes Communications Galaxy, Inc. and Hughes Communications, Inc.

ICO Services Limited
ICO USA Service Group (BT North America Inc., Hughes Telecommunications and Space Company,
Telecomunicaciones de Mexico, TRW Inc.)
Inmarsat Ltd.
Iridium LLC
KaStar Satellite Communications Corp.
Mobile Communications Holdings, Inc.
National Telecommunications and Information Administration
PanAmSat Corporation
Satellite Industry Association
Society of Broadcast Engineers, Inc.
Titan Wireless
United Telecom Council (formerly UTC, The Telecommunications Association)
WinStar Communications, Inc.
Wireless Communications Association International, Inc.

Supplemental Comments

Association for Maximum Service Television, Inc. and the National Association of Broadcasters
Boeing Company
Celsat America, Inc.
Constellation Communications Holding, Inc. (formerly Constellation Communications, Inc.)
Fixed Wireless Communications Coalition
Globalstar, L.P.
ICO Services Limited
ICO USA Service Group (BT North America Inc., Telecomunicaciones de Mexico, TRW Inc.)
Inmarsat Ltd.
Iridium LLC
Mobile Communications Holdings, Inc.
TMI Communications and Company, Limited Partnership
United Telecom Council (formerly UTC, The Telecommunications Association)

Ex Parte Presentations

Association for Maximum Service Television, Inc. and the National Association of Broadcasters
AT&T Wireless Services, Inc.
BellSouth Corporation
Boeing Company
Celsat America, Inc.
Department of Defense
Final Analysis Inc.
Fixed Wireless Communications Coalition
Globalstar, L.P.
ICO Services Limited
Eagle River Investments LLC
ICO USA Service Group
Inmarsat Ltd.
Iridium LLC
Mobile Communications Holdings, Inc.
STM Wireless, Inc.
Teledesic LLC
Wireless Communications Association International, Inc.

APPENDIX B

Final Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *Notice of Proposed Rulemaking (Notice)* in this docket, IB Docket No. 99-81.² The Commission sought written public comment on the possible significant economic impact on small entities by the policies and rules proposed in the *Notice*, including on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, this Report and Order

This *Report and Order* establishes a spectrum authorization approach to accommodate all proposed 2 GHz MSS systems, and service rules to govern the 2 GHz MSS systems. These actions are designed to assign the 2 GHz MSS spectrum to applicants, or reserve the 2 GHz MSS spectrum in the case of letter of intent filers, in an efficient manner. At the same time, these rules are designed to ensure systems implement their proposals in a manner that serves the public interest and results in the continued deployment of mobile satellite services to the public, with minimal disruption to existing 2 GHz band permittees and licensees.

B. Summary of Significant Issues Raised in Comments in Response to the IRFA

There were no comments which solely discussed or addressed the IRFA. The Commission has nonetheless considered any potential significant economic impact of the rules on small entities, and has designed its rules to reduce regulatory burdens on these entities accordingly.

C. Description and Estimate of Number of Small Entities To Which Rules Will Apply

The Commission has not developed a definition of small entities applicable to geostationary or non-geostationary orbit fixed-satellite or mobile satellite service operators. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules applicable to Communications Services, Not Elsewhere Classified. This definition provides that a small entity is one with \$11.0 million or less in annual receipts.⁴ According to Census Bureau data, there are 848 firms that fall under the category of Communications Services, Not Elsewhere Classified, which could potentially fall into the 2 GHz MSS category. Of those, approximately 775 reported annual receipts of \$11 million or less and qualify as small entities.⁵ The rules adopted in this *Report and Order* apply only to entities providing 2 GHz mobile satellite service. At least one of the 2 GHz MSS system proponents may be considered a small business at this time. Small businesses often do not have the financial ability to become 2 GHz MSS system operators because of the high implementation costs

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

² *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, IB Docket No. 99-81, 14 FCC Rcd 4843, 4895-97 (1999) (*Notice*).

³ See 5 U.S.C. § 604, as amended by the CWAAA.

⁴ 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4899.

⁵ U.S. Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 2D, Employment Size of Firms: 1992, SIC Code 4899 (issued May 1995).

associated with satellite systems and services. By the time of system implementation, we expect that the one small entity will no longer be considered a small business due to the capital requirements for launching and operating its proposed system. Therefore, because of the high implementation costs of providing 2 GHz MSS, we believe that this *Report and Order* will have no significant impact on small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

The rules adopted in the *Report and Order* affect those entities applying for 2 GHz MSS space station and earth station authorizations and those participating in assignment of 2 GHz MSS spectrum. As an initial matter, the nine 2 GHz MSS system proponents under consideration in this *Report and Order* are required to submit amendments to their previously-filed applications or letters of intent, to conform their proposed systems to the spectrum authorization and service rules adopted herein, including an orbital debris statement. The adopted rules also require each authorized 2 GHz MSS system to notify the Commission that it has met construction milestones, notify the Commission as to which spectrum block it chooses as its preferred spectrum block at the time that the first satellite in its system reaches its intended orbit, and, if it desires additional spectrum under the rural service initiative, notify the Commission of how it has achieved the required rural service criteria. Once operational, the 2 GHz MSS systems may need to coordinate with each other the use of spectrum outside of its preferred spectrum block. These negotiations are likely to require the skills of engineers to evaluate the technical requirements of co-frequency spectrum sharing and/or adjacent frequency operation on a non-interference basis.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

In developing the rules and policies adopted in this *Report and Order*, the Commission has attempted to minimize the burdens on all entities in order to allow maximum participation in the 2 GHz MSS market, while achieving the item's other objectives. The Commission considered band arrangements that would have assigned specified blocks of spectrum based on modulation technology (*i.e.*, code division multiple access or time division multiple access). Similarly, the Commission considered Globalstar's suggested band arrangement that would have required all systems to pre-negotiate a sharing architecture.⁶ The Commission rejected these alternatives, in part because these alternatives would have required all 2 GHz MSS operators to choose their technological parameters immediately, rather than allowing systems to optimize designs in order to promote innovation and reduce the economic impact of system build-out. In addition, to reduce the 2 GHz MSS operators' incumbent relocation costs, the Commission will exempt any 2 GHz MSS operator from relocation obligations if it is capable of sharing spectrum on a non-interference basis with the existing incumbent operations. See Section III.A.1., *supra*.

Report to Congress: The Commission will send a copy of this *Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the SBREFA. See 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of this *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register. See 5 U.S.C. § 604(b).

⁶ Globalstar Comments at 12 & n.14.

APPENDIX D**Final Rules**

Title 47 of the Code of Federal Regulations, Part 25, is amended as follows:

1. The authority citation for Part 25 is amended to read as follows:

Authority: 47 U.S.C. 701-744. Interprets or applies Section 4, 301, 302, 303, 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

2. Section 25.114 is amended by revising paragraph (c) to read as follows:

Section 25.114 Applications for space station authorizations.

* * * * *

(c) The following information in narrative form shall be contained in each application:

* * *

(6) * * *

(iii) if applicable, the feeder link and inter-satellite service frequencies requested for the satellite, together with any demonstration otherwise required by this chapter for use of those frequencies (see, e.g., Sec. 25.203 (j) and (k));

* * *

(21) Applications for authorizations in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service shall also provide all information specified in Sec. 25.143.

* * * * *

3. Section 25.115 is amended by revising paragraph (d) to read as follows:

Section 25.115 Application for earth station authorizations.

* * * * *

(d) User transceivers in the NVNG, 1.6/2.4 GHz Mobile-Satellite Service, and 2 GHz Mobile-Satellite Service need not be individually licensed. Service vendors may file blanket applications for transceivers units using FCC Form 312, Main Form and Schedule B, and specifying the number of units to be covered by the blanket license. Each application for a blanket license under this section shall include the information described in Sec. 25.136.

* * * * *

4. Section 25.121 is amended by revising paragraph (a) to read as follows:

Section 25.115 License term and renewals.

(a) *License term.* Licenses for facilities governed by this part will be issued for a period of 10 years, except that licenses and authorizations in the 2 GHz Mobile-Satellite Service will be issued for a period of 15 years.

* * * * *

5. Section 25.133 is amended by revising paragraph (b) to read as follows:

Section 25.133 Period of construction; certification of commencement of operation.

* * * * *

(b) Each license for a transmitting earth station included in this part shall also specify as a condition therein that upon the completion of construction, each licensee must file with the Commission a certification containing the following information: The name of the licensee; file number of the application; call sign of the antenna; date of the license; a certification that the facility as authorized has been completed and that each antenna facility has been tested and is within 2 dB of the pattern specified in Sec. 25.209, Sec. 25.135 (NVNG MSS earth stations), or Sec. 25.213 (1.6/2.4 GHz Mobile-Satellite Service and 2 GHz Mobile-Satellite Service earth stations); the date on which the station became operational; and a statement that the station will remain operational during the license period unless the license is submitted for cancellation. For stations authorized under Sec. 25.115(c) of this part (Large Networks of Small Antennas operating in the 12/14 GHz bands) and Sec. 25.115(d) of this part (User Transceivers in the Mobile-Satellite Service), a certificate must be filed when the network is put into operation.

* * * * *

6. Section 25.136 is amended in its entirety to read as follows:

Section 25.136 Operating provisions for earth station networks in the 1.6/2.4 GHz mobile-satellite service and 2 GHz mobile-satellite service.

In addition to the technical requirements specified in Sec. 25.213, earth stations operating in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service are subject to the following operating conditions:

(a) User transceiver units associated with the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service may not be operated on civil aircraft unless the earth station has a direct physical connection to the aircraft Cabin Communication system.

(b) No person shall transmit to a space station unless the user transceiver is first authorized by the space station operator or by a service vendor authorized by that operator, and the specific transmission is conducted in accordance with the operating protocol specified by the system operator.

(c) Any user transceiver unit associated with this service will be deemed, when communicating with a particular 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service system pursuant to paragraph (b) of this section, to be temporarily associated with and licensed to the system operator or service vendor holding the blanket earth station license awarded pursuant to Section 25.115(d). The domestic earth station licensee shall, for this temporary period, assume the same licensee responsibility for the user transceiver as if the user transceiver were regularly licensed to it.

7. Section 25.137 is amended by adding new paragraph (d) to read as follows:

Section 25.137 Application requirements for earth stations operating with non-U.S. licensed space stations.

* * * * *

(d) Earth station applicants requesting authority to operate with a non-U.S. licensed space station must demonstrate that the space station the applicant seeks to access has complied with all applicable Commission milestones, reporting requirements, and any other applicable service rules required for non-U.S. licensed systems to operate in the United States.

* * * * *

8. Section 25.143 is amended by revising paragraphs (a), (b)(1), (b)(2), (e) and (f)(1) to read as follows:

Section 25.143 Licensing provisions for the 1.6/2.4 GHz mobile-satellite service and 2 GHz mobile-satellite service.

(a) *System License*: Applicants authorized to construct and launch a system of technically identical satellites will be awarded a single "blanket" license. In the case of non-geostationary satellites, the blanket license will cover a specified number of space stations to operate in a specified number of orbital planes. In the case of geostationary satellites, as part of a geostationary-only satellite system or a geostationary/non-geostationary hybrid satellite system, an individual license will be issued for each satellite to be located at a geostationary orbital location.

(b) *Qualification Requirements*.

(1) *General Requirements*: Each application for a space station system authorization in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service shall describe in detail the proposed satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, each application shall include the information specified in Sec. 25.114. Non-U.S. licensed systems shall comply with the provisions of Sec. 25.137. System proponents seeking authorization in the 2 GHz Mobile-Satellite Service also shall describe the design and operational strategies that they will use, if any, to mitigate orbital debris. Applicants must submit a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the spacecraft.

(2) *Technical Qualifications*: In addition to providing the information specified in paragraph (b)(1) of this section, each applicant and letter of intent filer shall demonstrate the following:

(i) That a proposed system in the 1.6/2.4 GHz MSS frequency bands employs a non-geostationary constellation or constellations of satellites;

(ii) That a system proposed to operate using non-geostationary satellites be capable of providing mobile satellite services to all locations as far north as 70 deg. North latitude and as far south as 55 deg. South latitude for at least 75% of every 24-hour period, i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5 deg. for at least 18 hours each day within the described geographic area;

(iii) That a system proposed to operate using non-geostationary satellites be capable of providing mobile satellite services on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5 deg. at all times within the described geographic areas; and

(iv) That a system only using geostationary orbit satellites, at a minimum, be capable of providing mobile satellite services on a continuous basis throughout the 50 states, Puerto Rico, and the U.S. Virgin Islands, if technically feasible.

(v) That operations will not cause unacceptable interference to other authorized users of the spectrum. In particular, each application in the 1.6/2.4 GHz frequency bands shall demonstrate that the space station(s) comply with the requirements specified in Sec. 25.213.

* * *

(e) Reporting requirements.

(1) All operators of 1.6/2.4 GHz Mobile-Satellite Service systems and 2 GHz Mobile-Satellite Service systems shall, on October 15 of each year, file with the International Bureau and the Commission's Columbia Operations Center, Columbia, Maryland, a report containing the following information current as of September 30 of that year:

* * *

(iii) A detailed description of the utilization made of the in-orbit satellite system. That description should identify the percentage of time that the system is actually used for U.S. domestic or transborder transmission, the amount of capacity (if any) sold but not in service within U.S. territorial geographic areas, and the amount of unused system capacity. 2 GHz Mobile Satellite systems receiving expansion spectrum as part of the unserved areas spectrum incentive must provide a report on the actual number of subscriber minutes originating or terminating in unserved areas as a percentage of the actual U.S. system use.

(3) All operators of 2 GHz Mobile-Satellite Service systems must begin system construction upon award of a service link license to U.S.-based applicants, or upon designation of spectrum for non-U.S.-based systems, in accordance with milestones set forth in the respective system's authorization. All operators of 2 GHz Mobile-Satellite Service systems shall, within 10 days after a required implementation milestone as specified in the system authorization, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met. Failure to file timely certification of milestones, or filing disclosure of non-compliance, will result in automatic cancellation of the authorization with no further action required on the Commission's part.

(f) Safety and distress communications.

(1) Stations operating in the 1.6/2.4 GHz Mobile-Satellite Service and 2 GHz Mobile-Satellite Service that are voluntarily installed on a U.S. ship or are used to comply with any statute or regulatory equipment carriage requirements may also be subject to the requirements of sections 321(b) and 359 of the Communications Act of 1934. Licensees are advised that these provisions give priority to radio communications or signals relating to ships in distress and prohibits a charge for the transmission of maritime distress calls and related traffic.

* * * * *

9. Section 25.201 is amended by adding the following definition in alphabetical order to read as follows:

Section 25.201 Definitions.

* * * * *

2 GHz Mobile-Satellite Service. A mobile-satellite service that operates in the 1990-2025 MHz and 2165-2200 MHz frequency bands, or in any portion thereof.

* * * * *

10. Section 25.202 is amended by redesignating paragraph (a)(4) as paragraph (a)(4)(i), and adding new paragraph (a)(4)(ii) to read as follows:

Section 25.202 Frequencies, frequency tolerance and emission limitations.

(a) * * *

* * *

(4)(i) The following frequencies are available for use by the 1.6/2.4 GHz Mobile-Satellite Service:

1610-1626.5 MHz: User-to-Satellite Link

1613.8-1626.5 MHz: Satellite-to-User Link (secondary)

2483.5-2500 MHz: Satellite-to-User Link

(ii) The following frequencies are available for use by the 2 GHz Mobile-Satellite Service:

1990-2025 MHz: User-to-Satellite Link

2165-2200 MHz: Satellite-to-User Link

* * * * *

11. Section 25.203 is amended by revising paragraph (c) to read as follows:

Section 25.203 Choice of sites and frequencies.

* * * * *

(c) Prior to the filing of an application, an earth station applicant shall coordinate the proposed frequency usage with existing terrestrial users and with applicants for terrestrial station authorizations with previously filed applications in accordance with the following procedure:

* * * * *

12. Section 25.279 is amended by revising paragraph (a) to read as follows:

Section 25.279 Inter-satellite service.

(a) Any satellite communicating with other space stations may use frequencies in the inter-satellite service as indicated in Sec. 2.106. This does not preclude the use of other frequencies for such purposes as provided for in several service definitions, *e.g.*, FSS. The technical details of the proposed inter-satellite link shall be provided in accordance with Sec. 25.114(c).

* * * * *

SEPARATE STATEMENT OF CHAIRMAN WILLIAM E. KENNARD

Re: The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, FCC 00-302, IB Docket No. 99-81 (rel. August 25, 2000).

I am pleased that the Commission has adopted licensing and service rules for the 2 GHz mobile satellite service. This action should enhance competition and new service offerings, such as voice, data, and Internet services, in the mobile communications markets, to the benefit of consumers. The rules adopted are technologically neutral, and will facilitate deployment of a wide range of innovative systems.

I am particularly encouraged by this action because it involves one of the Commission's most important responsibilities – making service available “to all the people of the United States,” including those in rural and geographically remote areas. Congress has made the importance of this mandate eminently clear, for both traditional telecommunications services, and for emerging advanced services.

While satellite services have played an important role in bringing services to remote areas, there remain significant unmet needs for communications services in these areas. It is vitally important that the unique capabilities of satellite systems be used to address these needs. Because the cost of satellite communications is essentially the same, whether the particular user is in the largest city, or the most isolated area, satellite technologies present a unique opportunity to address unmet needs.

The newly adopted regulations include a significant incentive for companies to address this concern. This incentive puts the market to work to meet unmet needs, not through a specific command to perform in a certain way, but by providing a small but palpable incentive. Specifically, 2 GHz systems that offer satellite capacity to service providers that are capable of providing service to consumers in unserved areas will be eligible to receive additional 2 GHz spectrum. Our incentive recognizes that most 2 GHz providers will be selling wholesale capacity to retail providers and that 2 GHz providers will want additional spectrum. Therefore, the incentive is structured to encourage 2 GHz providers to enter into capacity arrangements with carriers that are serving rural areas.

This incentive is the product of an open process in which the Commission sought broad comment on service to rural areas, and on licensing mechanisms to foster such service. I look forward to the next step in this process -- working cooperatively with industry to implement this incentive promptly.

I strongly support this incentive, as an important step in pursuing all possible means for providing service to all the people of the United States.

SEPARATE STATEMENT OF COMMISSIONER SUSAN NESS

Re: The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, FCC 00-302, IB Docket No. 99-81 (rel. August 25, 2000).

I support our adoption today of rules governing the provision of Mobile Satellite Service ("MSS") in the 2 GHz Band. These rules implement a creative band plan that should result in the expeditious licensing of new satellite providers of voice, data, and messaging services.

Satellite technologies have long held the promise of providing communications services to rural areas in this country. Compared with terrestrial systems, there is relatively little incremental cost for satellites to reach customers located in high-cost areas, since providers do not have to extend network infrastructure across vast stretches of sparsely populated terrain. Our Order creates an extra incentive for MSS licensees to fulfill this promise by making available additional spectrum for service providers who market service to our nation's rural and remote areas.

I fully support the rural service incentive, but I write separately to suggest a willingness to entertain additional comments on the details of our mechanism for assigning this additional spectrum. I also would have preferred to establish a procedure for redistributing spectrum that is abandoned by licensees that do not meet their operational milestones. Given the unique nature of the band plan we adopt today, I believe that we should consider seriously whether to adopt a method for reassigning abandoned spectrum among existing licensees.

That having been said, I do not wish to see further delay in adopting the 2GHz MSS framework while we address the issues. Prospective licensees need authorization to begin their long-awaited service offerings. Adjustments to the mechanism for assigning additional spectrum and consideration of how best to reassign abandoned spectrum can be adequately addressed in further proceedings or on reconsideration.

Separate Statement of Commissioner Gloria Tristani

Re: *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, FCC 00-302, IB Docket No. 99-81 (rel. Aug. 25, 2000).

I am pleased to support this decision, which creates an innovative band plan for the next generation of the mobile satellite service (MSS) systems. The rules we adopt here account for the evolving nature of the MSS marketplace and set the stage for licensing and service deployment. I write separately to express my support for the expansion spectrum policy and our commitment to further examine 911 issues in the satellite context.

The 2 GHz MSS system proponents offer the promise of new and innovative services, particularly in rural and unserved areas. Our action here is yet another step in fulfilling our mandate to make nationwide and worldwide communications available to all Americans.¹ The expansion spectrum policy we adopt creates an incentive-based mechanism to encourage MSS rollout in unserved communities. The triggering criterion offers any MSS licensee the opportunity to gain additional spectrum if meaningful capacity is available for consumers in unserved areas. As a result, I support the policy.

In addition, I am pleased that as part of this decision the Commission commits to further examine 911 policies in the MSS context. Emergencies can and do occur just about everywhere, including locations where phone lines do not reach.² A mobile phone can mean the difference between isolation and help-on-the-way, and in such instances consumers should not have to be concerned about whether their handset is terrestrial- or satellite-based. They simply need access to public safety assistance.

The Commission previously concluded that enhanced 911 (E911) policies should not extend to the MSS industry in its early stages, but recent developments suggest that earlier technology hurdles may no longer be a barrier to E911 location capability in satellite services.³ Because this proceeding lacks an adequate record on E911, however, we direct the International Bureau to issue a public notice seeking input on E911 capability in satellite services, which we will consider as part of the upcoming Global

¹ See 47 U.S.C. § 151 (mandating that the Commission “make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”). The Commission has taken other notable action this summer to increase access to telecommunications services in unserved areas. See *Federal-State Joint Board on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, 12th Report and Order and Memorandum Opinion and Order, FCC 00-208 (rel. June 30, 2000); *Extending Wireless Telecommunications Services to Tribal Lands*, Report and Order and Further Notice of Proposed Rulemaking, FCC 99-266 (rel. June 30, 2000).

² The Cellular Telecommunications Industry Association (CTIA) reports that there were 43 million wireless 911 calls made in 1999, nearly 120,000 each day. See < <http://www.wow-com.com/statsurv/e911/> >.

³ See *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Third Report and Order, 14 FCC Rcd 17388 (1999) (revising our location rules to allow handset-based technologies to compete with network-based technologies).

Mobile Personal Communications by Satellite (GMPCS) proceeding.⁴ With a more fully developed record, I look forward to examining E911 issues in the MSS context and moving quickly in the GMPCS proceeding.

⁴ See *Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements*, Notice of Proposed Rulemaking, 14 FCC Rcd 5871 (1999).

**JOINT SEPARATE STATEMENT OF COMMISSIONERS
HAROLD FURCHTGOTT-ROTH AND MICHAEL POWELL
Approving in part, Dissenting in part**

Re: The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, FCC 00-302, IB Docket No. 99-81, Report and Order (Rel. August 25, 2000).

We support today's decision to promulgate service rules for Mobile Satellite Service (MSS) in the 2 GHz band. Many of the proposed service providers in this band have been waiting years to get underway. We are pleased that these providers will soon be competing in the marketplace.

We are concerned, however, about the decision to adopt a specific mechanism for determining eligibility for spectrum set-aside for service to rural areas. Conceptually, we are intrigued by the possibility of making additional spectrum available to providers who can demonstrate a meaningful commitment to providing service in underserved areas.¹ However, the United States has never before pursued a satellite licensing approach that rewards a provider with additional spectrum based on a service commitment. In assessing such a new initiative, it seems to us that the Commission has an obligation to weigh carefully the policy implications of any particular approach and to vet fully our proposals with the public. Here, we are concerned that the majority has rushed to judgment in an effort to proclaim that the FCC is "doing something" for underserved areas – in reality that "something" appears to be almost nothing.

This decision to adopt specific qualifying criteria for the set-aside spectrum is based on a virtually non-existent record. The gap in the record is understandable, since the parties were never provided with a clear opportunity to comment on any specific qualifying criteria. Instead, the Notice only sought "guidance" on "any policies or rules we could implement (or forebear from) to encourage 2 GHz MSS service to [unserved, rural, insular, or economically isolated] areas."² While the Notice did seek comments relating to providing incentives for service to rural and unserved communities,³ it did not even address the idea of having a spectrum set-aside, how much the set-aside should be or how providers could qualify for the "extra" spectrum. As a policy matter, we do not believe that such a vague request provided sufficient notice to the parties that such a specific and detailed decision would be forthcoming.⁴ The American people would be better served by promulgating a further notice to assess the efficacy of any particular approach. This agency is embarking in a potentially transformative new policy direction –

¹ See 47 U.S.C. § 151; *Order* at ¶¶ 31-35.

² See *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, Notice of Proposed Rulemaking*, IB Docket No. 99-81, 14 FCC Rcd 4843, ¶ 95 (1999).

³ See *id.*

⁴ It is also not completely clear that the Notice was legally sufficient. See *Fertilizer Inst. v. EPA*, 935 F.2d 1303, 1311 (D.C.Cir.1991) (holding 5 U.S.C. 553(b)(3) to mean that "an agency's notice must provide sufficient detail and rationale for the rule to permit interested parties to comment meaningfully."); *Horsehead Resource Development Company, Inc. v. Browner*, 16 F.3d 1246, 1268 (D.C. Cir. 1994) (stating that an agency is obligated to "describe the range of alternatives being considered with reasonable specificity. Otherwise, interested parties will not know what to comment on, and notice will not lead to better-informed agency decision-making.") (internal quotation marks and citation omitted).

more spectrum in exchange for service commitment quotas to targeted areas. We owe it to all the parties and the public to develop a full record before we proceed.⁵

We are also concerned that the qualifying criteria in the Order will not actually achieve the Commission's stated goals.⁶ Under the Order, when a service provider demonstrates to the Commission that it has reserved and contracted to use 10 percent of its U.S. capacity to serve rural and underserved areas, the Commission will notify other service providers that it will begin accepting applications for the set-aside expansion spectrum.⁷ Once all the applications are filed, the set-aside spectrum is to be divided evenly among the qualifying licensees. The "demonstration" requires only service contracts. There is no requirement that the system initially provide any service to rural areas. Nor is there any requirement that the qualifying system provide any particular level of service in the future. The only requirement is that 10 percent of the capacity on the system be reserved and contracted for this use. Under this standard, it appears that a ubiquitously available service, such as one that could be received on aircraft, would qualify based on its service to rural areas. In short, it appears that virtually every licensee will qualify for a sliver of the set aside spectrum, without anyone necessarily providing the desired amount of service to rural and underserved areas.

We applaud the Commission's efforts to explore how satellite services can be used to meet the communications demands of underserved and unserved areas. However, in embarking on this mission, we believe we have an obligation to ensure that our press release promises meaningfully correspond to our promulgated policies.

⁵ Certainly, we are sensitive to the need of making use of the spectrum as quickly as possible. By addressing the set-aside and eligibility in a further notice, however, even under the majority's approach the Commission could still provide immediate access to almost 90 percent of the spectrum, but could also ensure that the last piece of "expansion" spectrum is distributed fairly without undue regulatory constraints or requirements. Indeed, the majority is not even accepting applications for the expansion spectrum until one year after the first 2 GHz MSS authorization is issued; plenty of time to provide adequate notice. There are also readily available alternatives that would make all of the spectrum available for licensing immediately, while allowing us to consider meaningful incentives for service to rural areas. For example, a further notice could have explored the use of rural service incentives for the redistribution of "abandoned" spectrum. As the Order provides, "there is a probability that additional spectrum will become available as some authorized systems are not able to implement service." *Order* at ¶ 18. But the item does not establish a policy for the redistribution of abandoned or forfeited spectrum. It seems to push that off to a further proceeding. A further notice would have had at least two additional benefits: (1) it would get the ball rolling on establishing a policy for the redistribution of abandoned spectrum, with the potential of making it available to those truly motivated to serve rural areas; and (2) even if only one applicant dropped out, this process would consider more spectrum (3.88 MHz vs. 3.5 MHz) than the majority's set aside approach. This would also avoid holding hostage the sliver of "expansion" spectrum for a second processing round involving an uncertain and prolonged review of service contracts by the FCC more than a year from now. And, based on the comments about their current business plans, almost all applicants could eventually get the spectrum anyway since they are planning to serve these areas. *See id.* at ¶ 33.

⁶ *See, e.g., id.* at ¶ 32.

⁷ *See id.* at ¶¶ 35-38. However, requests for expansion spectrum will not be accepted until one year after the first 2 GHz system is authorized. *Id.* at ¶ 38.